WHAT IS CLAIMED

- forming an AgPd alloy thin film comprising the step of:

 forming an AgPd alloy thin film using a sputtering target

 material, wherein the AgPd alloy thin film comprises Pd in an

 amount ranging from 0.5 to 4.9 atomic %.
 - 2. The method of claim 1 wherein the alloy further comprises at least one of cu or Cr in an amount ranging from 0.1 to 3.5 atomic %.
 - 3. A thin film comprising:

an AgPd alloy comprising Pd in an amount ranging from 0.5 to 4.9 atomic %.

- 4. The thin film of claim 3 further comprising at least one of Cu or Cr in an amount ranging from 0.1 to 3.5 atomic %.
 - 5. An optical recording medium comprising:

a thin film formed by using an AgPd alloy comprising Pd in an amount ranging from 0.5 to 4.9 atomic %.

6. The optical recording medium of claim 5 wherein the AgPd alloy further comprises at least one of Cu or Cr in an amount ranging from 0.1 to 3.5 atomic %.

7. A metholof forming a thin film comprising the step of:
forming an AgPdTi alloy thin film using a sputtering target
material wherein the AgPdTi alloy comprises Pd in an amount ranging
from 0.1 to 1.5 atomic and Ti in an amount ranging from 0.1 to
2.9 atomic %.

8. A thin film comprising:

an AgPdTi alloy comprising Pd in an amount ranging from 0.1 to 1.5 atomic % and Ti in an amount ranging from 0.1 to 2.9 atomic %.

9. An optical recording medium comprising:

a thin film comprising an AgPdTi alloy comprising Pd in an amount ranging from 0.1 to 1.5 atomic % and Ti in an amount ranging from 0.1 to 2.9 atomic %.

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